

SECRET

25X1

R 312219Z

1968 MAY 31 22 58Z

FM NPIC

TO AFSSO AFSC ANDREWS AFB

INFO AFSSO USAF

AFSSO ASD, WRIGHT-PATTERSON AFB

ZEM

S E C R E T LIMITED DIST. CITE NPIC 3912.

AFSC FOR

25X1

ASD FOR

OUT 65261

1. THE FOLLOWING ATTITUDE AND POSITION DATA IS REQUIRED FROM THE
SYSTEM IN ORDER FOR NPIC TO MOST EXPEDIOUSLY EXPLOIT

THE RESULTANT IMAGERY:

THE RECORDER DATA SHOULD BE MADE AVAILABLE FOR
TRANSMISSION IN EXCESS-THREE (DS-3) CODE VIA THE UNIVAC
1004 DOD DATA LINK. EACH BLOCK OF DATA CONTAINS THE
INSTANTANEOUS CAMERA AND VEHICLE PARAMETERS FOR THE INSTANT
OF ZERO-SCAN PASSING. EACH BLOCK TO CONTAIN ELEVEL (11)
QUANTITIES, EACH SEPARATED BY A SPACE. THESE QUANTITIES,
THEIR FORMATS, AND UNITS ARE AS FOLLOWS:

1. FRAME COUNT
2. TIME (GMT:HR; MIN;SEC)
OR (ELAPSED TIME:SEC)
3. NADIR LATITUDE (DEG;MIN;SEC)
4. NADIR LONGITUDE (DEG;MIN;SEC)
5. ALTITUDE (FEET)
6. TRUE HEADING (DEG)
7. GROUND SPEED (KNOTS)
8. PITCH (DEG; PLUS NOSE UP)
9. ROLL (DEG; PLUS LEFT WING UP)
10. YAW (DEG; PLUS NOSE LEFT)
11. CAMERA POINTING ANGLE (0 VERT,
1-FORE, 2-AFT)

DDDD
DD DD DD.DD
DDDD.DD
DD DD DD.DDZ (N OR S)
DDD DD DD.DDZ (E OR W)
DDDDDD
DDD.D
DDDD
SDD.D
SDD.D
SDD.D

D

WHERE D EQUALS NUMERIC, Z EQUALS ALPHABETIC, AND S EQUALS ALGEBRAIC
SIGN; POSITIVE IS PLUS SIGN OR BLANK, AND NEGATIVE IS MINUS SIGN.
THE TRANSMISSION SHOULD BEGIN WITH ONE HEADER BLOCK BEFORE THE DATA
BLOCKS. THE HEADER BLOCK SHOULD CONTAIN THE MISSION NUMBER AND
CALIBRATED FOCAL LENGTH. IF ELAPSED TIME IS USED RATHER THAN GMT,
THE HEADER BLOCK SHOULD CONTAIN THE COUNTED-DOWN GMT OF 0-SEC
ELAPSED TIME. EACH QUANTITY IN THE DATA BLOCK MUST HAVE A CONSTANT-
FIELD WIDTH; I.E., LEADING ZEROS ARE USED WHERE APPLICABLE.

2. THE FRAME COUNT SHOULD BE RECORDED ON THE TAPE AT THE TIME
THE LENS PASSES THROUGH THE CENTER OF SCAN. THE CENTER OF SCAN MARK
ON THE FORMAT SHOULD CORRESPOND TO THE POINT AT WHICH THE FRAME
COUNT IS RECORDED ON THE TAPE. THE FRAME COUNT RECORDED ON THE
TAPE SHOULD BE THE SAME FRAME COUNT RECORDED ON THE FILM DATA
BLOCK.

3. YAW IS DEFINED AS THE INSTANTANEOUS ANGULAR DIFFERENCE BETWEEN
THE GROUND TRACK VELOCITY VECTOR AND THE TRUE HEADING OF THE VEHICLE.

4. ATTITUDE AND POSITION DATA IS ONLY REQUIRED ONCE FOR EACH
SENSOR OPERATION AND AT A FIXED INTERVAL WHEN SENSOR IS NOT IN
OPERATION.

5. IT IS SUGGESTED THAT ANOTHER MEETING BE HELD BETWEEN
CAMERA, INS RECORDER, AND VEHICLE CONTRACTORS AS WELL AS NPIC AND
AIR FORCE PERSONNEL TO DISCUSS NPIC REQUIREMENTS FOR ATTITUDE
AND POSITION DATA PLUS FORMAT FIDUCIAL AND ALPHA/NUMERIC RECORDED
DATA.

GP-1

S E C R E T

END OF MESSAGE

1	OFFICE
2	SEC. SEC.
3	SEC. SEC.
4	SEC. SEC.
5	SEC. SEC.
6	SEC. SEC.
7	SEC. SEC.
8	SEC. SEC.
9	SEC. SEC.
10	SEC. SEC.
11	SEC. SEC.
12	SEC. SEC.
13	SEC. SEC.
14	SEC. SEC.
15	SEC. SEC.
16	SEC. SEC.
17	SEC. SEC.
18	SEC. SEC.
19	SEC. SEC.
20	SEC. SEC.
21	SEC. SEC.
22	SEC. SEC.
23	SEC. SEC.
24	SEC. SEC.
25	SEC. SEC.
26	SEC. SEC.
27	SEC. SEC.
28	SEC. SEC.
29	SEC. SEC.
30	SEC. SEC.
31	SEC. SEC.
32	SEC. SEC.
33	SEC. SEC.
34	SEC. SEC.
35	SEC. SEC.
36	SEC. SEC.
37	SEC. SEC.
38	SEC. SEC.
39	SEC. SEC.
40	SEC. SEC.
41	SEC. SEC.
42	SEC. SEC.
43	SEC. SEC.
44	SEC. SEC.
45	SEC. SEC.
46	SEC. SEC.
47	SEC. SEC.
48	SEC. SEC.
49	SEC. SEC.
50	SEC. SEC.
51	SEC. SEC.
52	SEC. SEC.
53	SEC. SEC.
54	SEC. SEC.
55	SEC. SEC.
56	SEC. SEC.
57	SEC. SEC.
58	SEC. SEC.
59	SEC. SEC.
60	SEC. SEC.
61	SEC. SEC.
62	SEC. SEC.
63	SEC. SEC.
64	SEC. SEC.
65	SEC. SEC.
66	SEC. SEC.
67	SEC. SEC.
68	SEC. SEC.
69	SEC. SEC.
70	SEC. SEC.
71	SEC. SEC.
72	SEC. SEC.
73	SEC. SEC.
74	SEC. SEC.
75	SEC. SEC.
76	SEC. SEC.
77	SEC. SEC.
78	SEC. SEC.
79	SEC. SEC.
80	SEC. SEC.
81	SEC. SEC.
82	SEC. SEC.
83	SEC. SEC.
84	SEC. SEC.
85	SEC. SEC.
86	SEC. SEC.
87	SEC. SEC.
88	SEC. SEC.
89	SEC. SEC.
90	SEC. SEC.
91	SEC. SEC.
92	SEC. SEC.
93	SEC. SEC.
94	SEC. SEC.
95	SEC. SEC.
96	SEC. SEC.
97	SEC. SEC.
98	SEC. SEC.
99	SEC. SEC.
100	SEC. SEC.

SECRET